

WHAT IS CLAIMED IS:

1. A ceramic honeycomb filter comprising a sintered ceramic honeycomb body having porous partition walls defining flow paths, and plugs formed in predetermined flow paths for removing particulate matter from an exhaust gas passing through said porous partition walls, said sintered ceramic honeycomb body being made of a cordierite-based ceramic material; and at least part of said plugs comprising ceramic particles and an amorphous oxide matrix formed from colloidal oxide.
2. The ceramic honeycomb filter according to claim 1, wherein said ceramic particles are cordierite particles and/or amorphous silica particles.
3. The ceramic honeycomb filter according to claim 1 or 2, wherein said ceramic particles are pulverized powder of the same material as the sintered ceramic honeycomb body.
4. The ceramic honeycomb filter according to any one of claims 1-3, wherein said colloidal oxide is colloidal silica and/or colloidal alumina.
5. A method for producing a ceramic honeycomb filter comprising a sintered ceramic honeycomb body having porous partition walls defining flow paths, and plugs formed in predetermined flow paths for removing particulate matter from an exhaust gas passing through said porous partition walls, comprising the steps of forming said sintered ceramic honeycomb body by a cordierite-based ceramic material, and heating a plugging material filled in predetermined flow paths of said sintered ceramic honeycomb body to a temperature of 1000°C or lower to form plugs bonded to said sintered ceramic honeycomb body.
6. The method for producing a ceramic honeycomb filter according to claim 5, wherein the bonding temperature of said plugging material is 500°C or lower.
7. The method for producing a ceramic honeycomb filter according to

claim 5 or 6, wherein at least part of said plugs are formed by a plugging material containing ceramic particles and colloidal oxide.

8. The method for producing a ceramic honeycomb filter according to any one of claims 5-7, wherein said ceramic particles are pulverized powder of the same material as the sintered ceramic honeycomb body.

9. A plugging material comprising ceramic particles and colloidal oxide.